

B. Remarks

1. Status of the Claims

Claims 13-29 are pending in the application. All of the pending claims stand rejected under 35 U.S.C. § 112, 35 U.S.C. § 102(b), and/or 35 U.S.C. § 103(a). Applicant hereby amends claims 13 and 20-26, cancels claims 19 and 29, and adds new claims 30-32. Claims 1-12 were canceled by a previous amendment.

2. The Rejections of Claims 13, 14, and 20 Under 35 U.S.C. § 112 Have Been Overcome.

The examiner has rejected claims 14, 15, and 20 under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention on the grounds that “said desired form” as recited in claims 14 and 15 lacks antecedent basis and that it is not clear whether the phrases in parentheses in claim 20 are to limit the claim.

Claim 13, as amended, provides antecedent basis for “said desired form” as recited in claims 14 and 15. Claim 20 has been amended to delete the phrases in parentheses. As such, Applicant respectfully requests the examiner withdraw these bases for rejection.

3. The Rejections of Claims 13 and 29 Under 35 U.S.C. § 102(b) As Anticipated by Nien Have Been Overcome or Rendered Moot.

The examiner has rejected claims 13 and 29 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,201,355 to Nien (“Nien”) on the ground that “Nien discloses placing a biodegradable plastic composition in a press mold where it is heated and compressed into a shape and thereafter cutting to reshape.”

Claim 13, as amended, recites “a biodegradable plastic material comprising a biodegradable polymer into a desired form, said biodegradable polymer comprising (a) an esterified starch having a degree of substitution (DS) of about 0.4 or more and (b) an esterified

cellulose having a DS of about 0.4 or more, in a ratio by weight (a)/(b), of from 10/0 to 1/9.”

Nien does not disclose such a material. Indeed, the structure and properties of the biodegradable polymer recited in claim 13, which is a unique compound formed by the reaction of the esterified starch component and the esterified cellulose component, are substantially different from the structure and properties of any of the PVC powder, surface-treated starch, calcium carbonate, and unspecified stabilizer, or the mixture thereof, disclosed in the Nien reference. As would be known to one skilled in the art, the mixture set forth in the Nien reference essentially yields a solid suspension of PVC in surface-treated starch – it does not react to form a new compound chemically distinct from the compounds comprising the mixture.

Further, claim 13, as amended, recites cutting or machining a block of biodegradable plastic material with hand tools or machine tools to form a biodegradable model. Whereas Nien discloses cutting slats from a sheet of material formed from the mixture described therein, Nien neither discloses nor suggests forming a model by cutting or machining a block of material. Applicant respectfully submits that forming a model by cutting or machining a block of material generally is substantially more complicated than simply cutting a sheet of material into slats, and that the former process cannot be readily performed on a material having insufficient resistance to heat. Applicant respectfully submits that the material disclosed by Nien is not suitable for being formed into a model by cutting or machining using hand tools or machine tools because such material lacks sufficient resistance to heat and good dimensional stability.

For at least these reasons, Applicant respectfully requests the examiner withdraw this basis for rejection of claim 13. Applicant hereby cancels claim 29. As such, the rejection of claim 29 has been rendered moot.

4. The Rejections of Claims 13, 16, and 19-23 Under 35 U.S.C. § 102(b) As Anticipated by Rimsa Have Been Overcome or Rendered Moot.

The examiner has rejected claims 13, 16, and 19-23 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,656,682 to Rimsa et al. (“Rimsa”) on the ground that Rimsa discloses a composition of material molded under heat and pressure in a manner that falls within the scope of these claims.

Claim 13, as amended, recites cutting or machining a block of biodegradable plastic material with hand tools or machine tools to form a biodegradable model. Rimsa does not teach cutting or machining a block of biodegradable plastic material with hand tools or machine tools to form a biodegradable model. Although Rimsa recites a number of potential uses for the material Rimsa discloses, none of these potential uses is similar to or suggestive of cutting or machining such material with hand tools or machine tools to form a biodegradable model. For at least this reason, Applicant respectfully requests the examiner withdraw this basis for rejection of claim 13 and claims 16 and 20-23, which depend from and add further limitations to claim 13. Applicant hereby cancels claim 19. As such, the rejection of claim 19 has been rendered moot.

5. The Rejections of Claims 13-27 Under 35 U.S.C. § 103(a) as Unpatentable Over Tanaka In View of Rimsa Have Been Overcome or Rendered Moot.

The examiner has rejected claims 13-27 under 35 U.S.C. § 103(a) as being unpatentable over Tanaka et al., U.S. Patent No. 5,693,786, in view of Rimsa on the ground that this combination of references teaches the subject matter of these claims.

Claim 13, as amended, recites cutting or machining a block of biodegradable plastic material with hand tools or machine tools to form a biodegradable model. Neither Tanaka nor Rimsa nor the combination thereof teaches cutting or machining a block of biodegradable plastic material with hand tools or machine tools to form a biodegradable model. Although both Tanaka

and Rimsa recite a number of potential uses for the materials they disclose, none of these uses is similar to or suggestive of cutting or machining such material with hand tools or machine tools to form a biodegradable model. For at least this reason, Applicant respectfully requests the examiner withdraw this basis for rejection of claim 13 and claims 14-18 and 20-27, which depend from and add further limitations to claim 13. Applicant hereby cancels claim 19. As such, the rejection of claim 19 has been rendered moot.

6. The Rejections of Claims 13-17, 19-23 and 25-28 Under 35 U.S.C. § 103(a) as Unpatentable Over Narayan In View of Rimsa Have Been Overcome or Rendered Moot.

The examiner has rejected claims 13-17, 19-23, and 25-28 under 35 U.S.C. § 103(a) as being unpatentable over Narayan et al., U.S. Patent No. 5,728,824, in view of Rimsa on the ground that this combination of references teaches the subject matter of these claims.

Claim 13, as amended, recites cutting or machining a block of biodegradable plastic material with hand tools or machine tools to form a biodegradable model. Neither Narayan nor Rimsa nor the combination thereof teaches cutting or machining a block of biodegradable plastic material with hand tools or machine tools to form a biodegradable model. Although both Narayan and Rimsa recite a number of potential uses for the materials they disclose, none of these uses is similar to or suggestive of cutting or machining such material with hand tools or machine tools to form a biodegradable model. For at least this reason, Applicant respectfully requests the examiner withdraw this basis for rejection of claim 13 and claims 14-17, 20-23, and 25-28 which depend from and add further limitations to claim 13. Applicant hereby cancels claim 19. As such, the rejection of claim 19 has been rendered moot.

7. Conclusion

Applicant respectfully submits that the claims are in condition for allowance and respectfully requests reconsideration towards that end.

Respectfully submitted,



Mark P. Vrla
Registration No. 43,973

Jenner & Block LLP
One IBM Plaza
Chicago, IL 60611

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